

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problems Mailbox.**

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 08-010445

(43)Date of publication of application : 16.01.1996

(51)Int. Cl.

A63F 9/22

(21)Application number : 07-178328

(71)Applicant : CASIO COMPUT CO LTD

(22)Date of filing : 14.07.1995

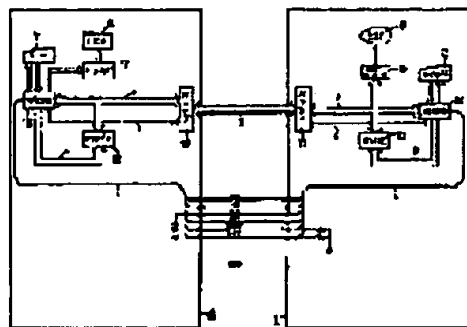
(72)Inventor : SATO SOICHI

(54) DOUBLE ELECTRONIC GAME MACHINE

(57)Abstract:

PURPOSE: To provide a device which helps a player enjoy a game on a large screen even if the game machine is small.

CONSTITUTION: A game program stored in a sub memory 13 of a small game machine 6 is run by operating a key 7 and the process thereof is displayed by LCD8. The game program stored in the sub memory 13 is stored in a main memory of a double game machine through buffers 12, 11 and run by keying operation of a keyboard 2 and the process of the game is displayed on a large screen like CRT3.



LEGAL STATUS

[Date of request for examination] 14.07.1995

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 2642088

[Date of registration] 02.05.1997

[Number of appeal against examiner's decision of rejection]

* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The external view of the electrophile game equipment 1 and the child electronic game equipment 6 by this invention.

[Drawing 2] The circuit diagram when connecting both the game equipments 1 and 6.

[Drawing 3] The timing diagram view showing the transfer control signal and the content of a transfer at the time of loading.

[Drawing 4] The schematic diagram showing the state of loading.

[Drawing 5] The timing diagram view showing the transfer control signal and the content of a transfer at the time of save.

[Drawing 6] The schematic diagram showing the state of save.

[Drawing 7] two or more child electronic game equipments 6 -- the opportunity schematic drawing showing the state of loading from

[Drawing 8] The schematic diagram showing the state of changing a game program after loading.

[Drawing 9] The external view of each game equipments 1 and 6 of the 2nd example.

[Drawing 10] The external view of each game equipments 1 and 6 of the 3rd example.

[Drawing 11] The cross section showing the state where electrophile game equipment 1 was equipped with the child electronic game equipment 6 of the 3rd example.

[Drawing 12] The schematic diagram in the case of carrying out the display control of CRT display 3 with child electronic game equipment 6 through the electrophile game equipment 1 of the 3rd example.

[Drawing 13] The timing diagram view showing a transfer control signal and the content of a transfer in case the keycode of the child electronic game equipment 6 of the 3rd example is transmitted to electrophile game equipment 1 by interruption processing.

[Drawing 14] The external view when connecting each game equipments 1 and 6 of the 4th example.

[Drawing 15] The schematic diagram showing the state of loading in the case of drawing 14 .

[Description of Notations]

1 Electrophile Game Equipment

2 Keyboard

3 CRT (Braun Tube) Display

4 Stowage

5, 9 Nine Connection equipment

6 Child Electronic Game Equipment

7 Key

8 Liquid Crystal Display

10 Main Memory

13 Sub Memory

14 Main CPU (Central Processing Unit)

15 CRT Controller

16 Factice CPU

17 Driver

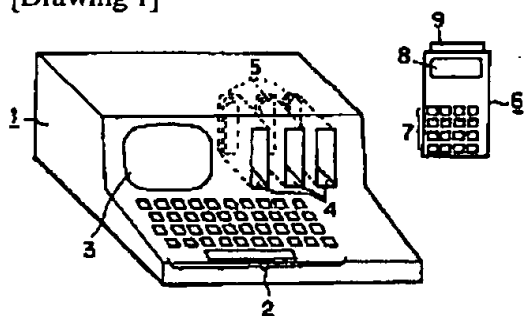
* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

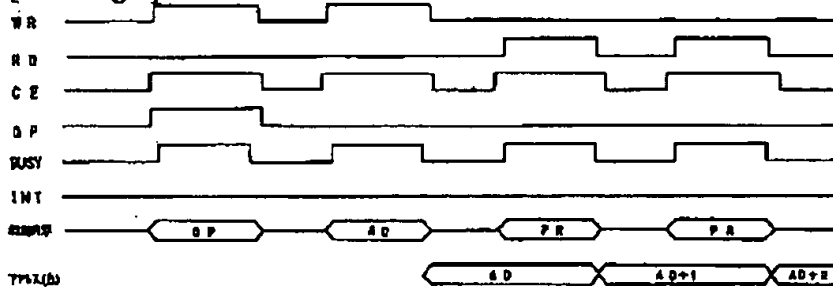
1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DRAWINGS

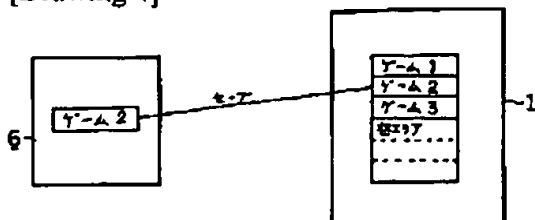
[Drawing 1]



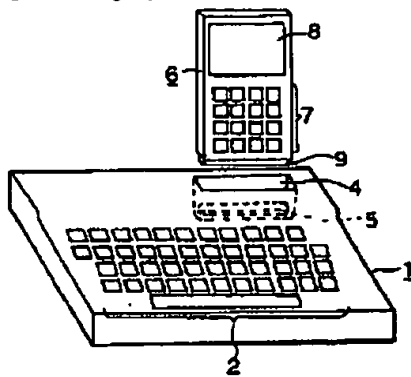
[Drawing 3]



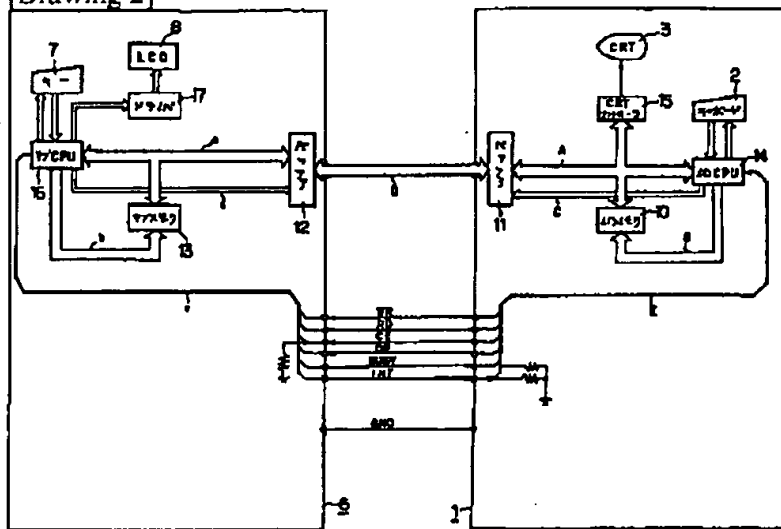
[Drawing 4]



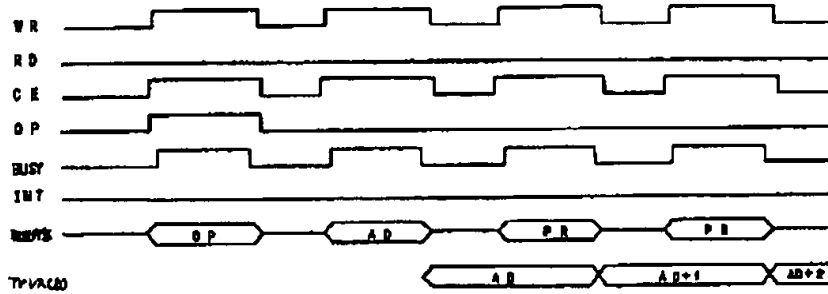
[Drawing 9]



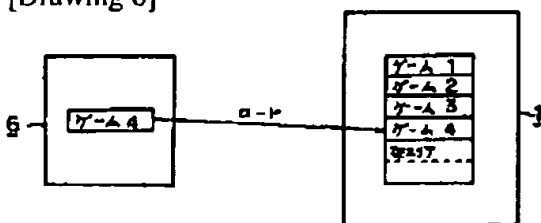
[Drawing 2]



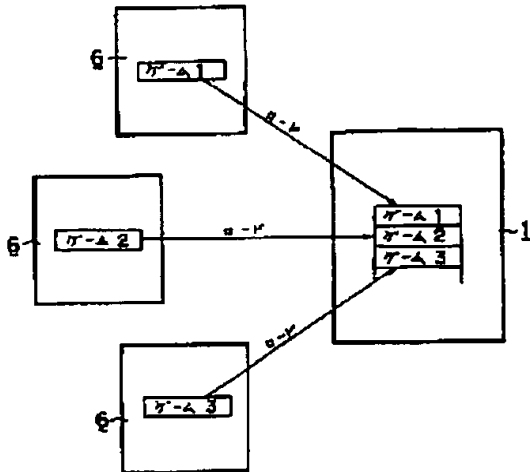
[Drawing 5]



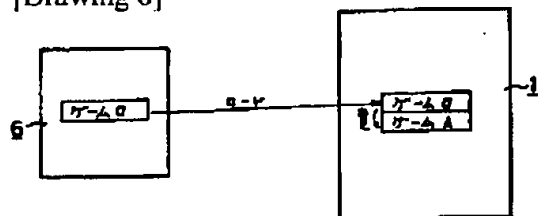
[Drawing 6]



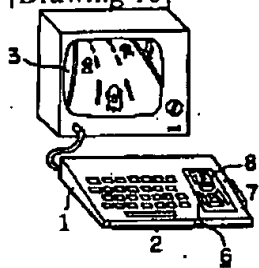
[Drawing 7]



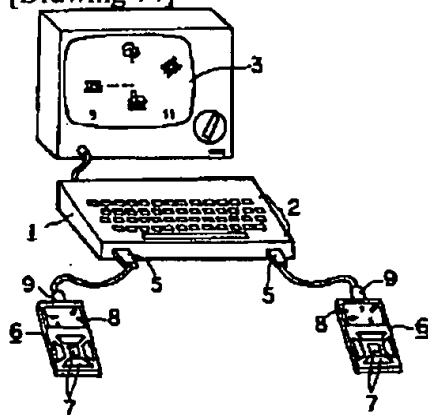
[Drawing 8]



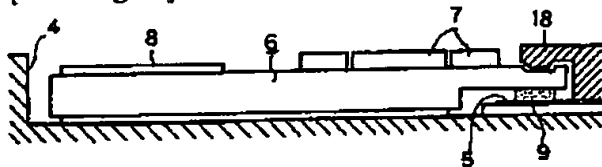
[Drawing 10]



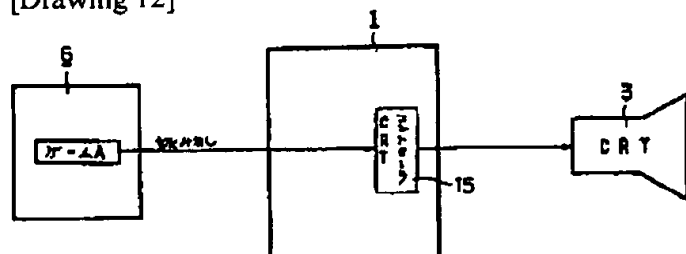
[Drawing 14]



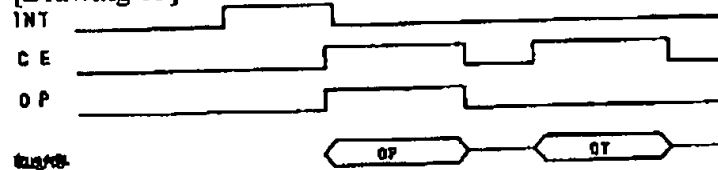
[Drawing 11]



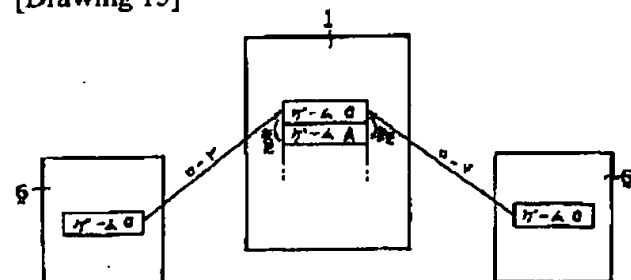
[Drawing 12]



[Drawing 13]



[Drawing 15]



[Translation done.]

* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

MEANS

[Means for Solving the Problem] In order to attain the above-mentioned technical problem, this invention makes it the main point to connect large-sized electronic game equipment and small electronic game equipment, and to have been made to perform the game of small game equipment with large-sized game equipment equipped with the big key stroke section and a big big screen.

[0006]

[Embodiments of the Invention] With reference to drawing 1 - drawing 8, it explains in full detail per 1st example of this invention below. By this example transmitting the game program of small child electronic game equipment to large-sized electrophile game equipment (henceforth "loading"), and enabling it to use it with electrophile game equipment, it is also possible to perform the game of child electronic game equipment with electrophile game equipment, and to transmit a game program to child electronic game equipment from electrophile game equipment (henceforth "save").

[0007] One in drawing 1 is electrophile game equipment large-sized BASOKON type, a keyboard 2 is formed in the anterior upper surface of this electrophile game equipment 1, the CRT (Braun tube) display 3 of color display is formed in the field where the case of the game equipment in the inner part of this keyboard 2 stood straight, and stowage 4 which carried out opening to three length long and slender is formed next to this CRT display 3. this stowage 4 -- connection equipment 5 is formed in the field of the end of the back which is, respectively

[0008] On the other hand, 6 is child electronic game equipment small handicap type which has a calculator function, a key 7 is arranged under this child electronic game equipment 6, up a liquid crystal display 8 is formed, and connection equipment 9 is further formed in the upper limb. This child electronic game equipment 6 is contained by the stowage 4 of the above-mentioned electrophile game equipment 1, and the connection equipment 9 of child electronic game equipment 6 upper limb is connected to the connection equipment 5 in a stowage 4.

[0009] Drawing 2 is the circuit diagram showing the state where both the electronic game equipments 1 and 6 were electrically connected through the connection equipments 5 and 9, and the main memory 10 in electrophile game equipment 1 consists of RAM (RAM), and it also has the empty area which is not memorized at all while capacity is large and three game programs of a game 1 to the game 3 are memorized. The game program read from this main memory 10 to main CPU14 is saved to child electronic game equipment 6 through the buffer 11 for I/O of electrophile game equipment 1, and the buffer 12 for I/O of child electronic game equipment 6, and is written in the sub memory 13. The game program loaded to main CPU14 of electrophile game equipment 1 through both the above-mentioned buffers 11 and 12 from the sub memory 13 of another side child electronic game equipment 6 is written in the empty area of main memory 10. This save and loading are performed through bus lines A, D, and a.

[0010] The above-mentioned keyboard 2 is the stowage 4 besides the above-mentioned save and loading.... It consists of keys, such as selection, game selection, a game start, and game advance, and by the key scanning signal from main CPU14, each key stroke is detected as a key stroke signal, and is given to main CPU14. Main CPU14 performs the above-mentioned save and transfer processing of

loading, and also it chooses and reads a game program from main memory 10, performs game executive operation, and displays the execution process on above-mentioned CRT display 3 one by one through the CRT controller 15. Moreover, main CPU14 gives address data through a bus line B in access to main memory 10.

[0011] Moreover, the above-mentioned key 7 consists of a game advance key, a mode exchange key, a ten key, etc., and operation of each key is detected as a key stroke signal by the key scanning signal from a factice CPU 16, and is given to a factice CPU 16. A factice CPU 16 gives address data to the sub memory 13 through a bus line b in the above-mentioned save and loading, and also he reads a game program from the sub memory 13, performs game executive operation, and displays the execution process on the above-mentioned liquid crystal display 8 one by one through a driver 17. As for the above-mentioned buffers 11 and 12, input/output control is made in save and loading by each control signals C and c from the mains CPU14 and CPU16, respectively.

[0012] Moreover, the direct file of main CPU14 and the factice CPU 16 is carried out through the control signal lines E and e, the write-in signal WR, the read-out signal RD, the selection (chip enable) signal CE, and the instruction code transfer signal OP are given from main CPU14 to a factice CPU 16 at the time of the above-mentioned save or loading, busy signal BUSY and interrupt signal INT are given to it from a factice CPU 16 to main CPU14, and transfer control is made at it.

[0013] Next, operation of this example is described. First, as shown in drawing 4, in order to load a game program to parent electronic game equipment 1 from the child electronic game equipment 6 with which the game program of a game 4 is memorized, child electronic game equipment 6 is put into a stowage 4, and the stowage selection key and load key according to the stowage 4 are operated. As shown in drawing 3, then, main CPU14 If the manipulate signal of the above-mentioned stowage selection key is detected, while the bus line from the child electronic game equipment 6 which should give a factice CPU 16 a selection signal CE, and should load it by this will be opened If the manipulate signal of the above-mentioned load key is detected, the instruction code transfer signal OP will also be given to a factice CPU 16. The transfer output of the instruction code of loading is carried out through bus lines A, D, and a by this, and it is further behind a little, and the write-in signal WR is also given to a factice CPU 16, and, thereby, the instruction code of loading is written in a factice CPU 16. A factice CPU 16 gives busy signal BUSY to main CPU14 during this writing.

[0014] After the writing of a load instruction code finishes, thereby, the output of busy signal BUSY is suspended, and main CPU14 suspends the output of the write-in signal WR, and a factice CPU 16 is behind a little, and also stops the output of a selection signal CE and the instruction code transfer signal OP. Then, a factice CPU 16 gives a read-out command signal to the sub memory 13 based on the instruction code of written-in loading.

[0015] Subsequently, main CPU14 gives a factice CPU 16 a selection signal CE again, the transfer output of the start-address data for read-out of the sub memory 13 by this is carried out through bus lines A, D, and a, it is behind a little, the write-in signal WR is also given to a factice CPU 16, and, thereby, the above-mentioned start-address data are written in a factice CPU 16. The factice CPU 16 has given busy signal BUSY to main CPU14 in the meantime.

[0016] After the writing of start-address data finishes, thereby, a factice CPU 16 suspends the output of busy signal BUSY, and main CPU14 suspends the output of the write-in signal WR, it is overdue a little and also suspends the output of a selection signal CE. Then, a factice CPU 16 gives the written-in start-address data to the sub memory 13 through a bus line b, and specifies the read-out start address of the sub memory 13.

[0017] Moreover, main CPU14 is performing specification of the start address of the empty area in main memory 10 through the bus line B by detection of the manipulate signal of the above-mentioned load key at this time.

[0018] And main CPU14 gives a factice CPU 16 a selection signal CE again, it is behind a little, the read-out signal RD is shortly given to a factice CPU 16, a factice CPU 16 reads the game program of a game 4 from the start address of the sub memory 13 by this, the transfer output of this program is carried out through bus lines a, D, and A, and it is written in the empty area of main memory 10. The factice

CPU 16 has also given busy signal BUSY to main CPU14 in the meantime.

[0019] After loading of the program of the start address of the game program of a game 4 finishes, thereby, a factice CPU 16 suspends the output of busy signal BUSY, and main CPU14 suspends the output of the read-out signal RD, it is overdue a little and also suspends the output of a selection signal CE. Then, a factice CPU 16 does one stepping of the address data to the sub memory 13.

[0020] Then, main CPU14 gives a factice CPU 16 like **** a selection signal CE and the read-out signal RD which was overdue a little, and, thereby, the program of the next address of the start address of the game program of the game 4 in the sub memory 13 is loaded.

[0021] Loading will be ended, if the game program of a game 4 is loaded one by one and loading of the program of a last address is made by repeating this operation. If loading is completed, by operating the game selection key, game start key, and game advance key of a game 4 in a keyboard 2, the game program of the game 4 loaded in main memory 10 is read, game executive operation is made by main CPU14, and it is displayed like this real overshooting on CRT display 3 through the CRT controller 15.

[0022] In this way, the game which is powerful in the game of child electronic game equipment 6 by the big operation key of the keyboard 2 of CRT display 3 of a big screen can be enjoyed, for example, the problem of **** can be created with child electronic game equipment 6, and this can be solved with parent electronic game equipment.

[0023] Moreover, if the child electronic game equipment 6 of another kind is inserted in another stowage 4 and same operation is performed, since the game program is loaded to the remaining empty area of main memory 10, many games can be set and enjoyed.

[0024] In addition, a game program may not be loaded to performing the game of this child electronic game equipment 6 with parent electronic game equipment 1, but main CPU14 of parent electronic game equipment 1 may read the game program in the sub memory 13 of child electronic game equipment 6 to it directly. In this case, the instruction code transmitted serves as "read-out" instead of "loading."

[0025] Next, in order to save a game program to child electronic game equipment 6 from parent electronic game equipment 1, child electronic game equipment 6 is put into a stowage 4, and the game selection key about the stowage selection key according to the stowage 4 and the game 2, for example, the game shown in drawing 6, to save and a save key are operated. As shown in drawing 5, then, main CPU14 If the manipulate signal of the above-mentioned stowage selection key is detected, while the bus line to the child electronic game equipment 6 which should give a factice CPU 16 a selection signal CE, and should save it by this will be opened If the manipulate signal of the above-mentioned save key is detected, the instruction code transfer signal OP will also be given to a factice CPU 16. The transfer output of the instruction code of save is carried out through bus lines A, D, and a by this, and it is further behind a little, and the write-in signal WR is also given to a factice CPU 16, and, thereby, the instruction code of save is written in a factice CPU 16. A factice CPU 16 gives busy signal BUSY to main CPU14 during this writing.

[0026] After the writing of the instruction code of save finishes, thereby, the output of busy signal BUSY is suspended, and main CPU14 suspends the output of the write-in signal WR, and a factice CPU 16 is behind a little, and also stops the output of a selection signal CE and the instruction code transfer signal OP. Then, a factice CPU 16 gives a write-in command signal to the sub memory 13 based on the instruction code of the written-in save.

[0027] Subsequently, main CPU14 gives a factice CPU 16 a selection signal CE again, the transfer output of the start-address data for the writing of the sub memory 13 by this is carried out through bus lines A, D, and a, it is behind a little, the write-in signal WR is also given to a factice CPU 16, and, thereby, the above-mentioned start-address data are written in a factice CPU 16. In the meantime, the factice CPU 16 has given busy signal BUSY to main CPU14.

[0028] After the writing of start-address data finishes, thereby, a factice CPU 16 suspends the output of busy signal BUSY, and main CPU14 suspends the output of the write-in signal WR, it is overdue a little and also suspends the output of a selection signal CE. Then, a factice CPU 16 gives the written-in start-address data to the sub memory 13 through a bus line b, and specifies the write-in start address of the sub memory 13.

[0029] Moreover, at this time, if the manipulate signal of the game selection key of the above-mentioned game 2 is given, main CPU14 gives the start-address data of the game program of the game 2 in the main memory 10 corresponding to this selection game to main memory 10 through a bus line B, and is performing addressing of main memory 10.

[0030] And main CPU14 gives a factice CPU 16 a selection signal CE again, it is behind a little, the write-in signal WR is also given to a factice CPU 16, the transfer output of the game program of the start address of the game 2 of the above-mentioned main memory 10 is carried out through bus lines A, D, and a by this, and it is written in the sub memory 13. The factice CPU 16 has also given busy signal BUSY to main CPU14 in the meantime.

[0031] After save of the program of the start address of the game program of a game 2 finishes, thereby, a factice CPU 16 suspends the output of busy signal BUSY, and main CPU14 suspends the output of the write-in signal WR, it is overdue a little and also suspends the output of a selection signal CE. Then, a factice CPU 16 does one stepping of the address data to the sub memory 13.

[0032] Then, main CPU14 gives a factice CPU 16 like **** a selection signal CE and the write-in signal WR which was overdue a little, and, thereby, the program of the next address of the start address of the game program of the game 2 in main memory 10 is saved.

[0033] Save will be ended, if the game program of a game 2 is saved one by one and save of the program of a last address is made by repeating this operation. If save is completed, by extracting child electronic game equipment 6 from a stowage 4, and operating the game advance key in a key 7, the game program of the game 2 saved to the sub memory 13 is read, game executive operation is made as a factice CPU 16, and it is displayed like this real overshooting on the liquid crystal display 8 through the driver 17.

[0034] In this way, the game in electrophile game equipment 1 can be enjoyed with child electronic game equipment 6 convenient to carry, for example, the problem of ***** can be created with electrophile game equipment 1, and this can be solved with child electronic game equipment.

[0035] Moreover, what is necessary is just to change operation of the stowage selection key of a keyboard 2 according to it, when child electronic game equipment 6 is inserted in another stowage 4. Furthermore, what is necessary is just to change operation of the game selection key of a keyboard 2 according to it to save another game. Then, the same save operation as **** is made only by changing to that to which addressing from main CPU14 to main memory 10 corresponds.

[0036] In this way, many games can be arbitrarily chosen as child electronic game equipment 6, and can also be set as it.

[0037] Moreover, as shown in drawing 7, this example can set child electronic game equipment 6 to stowage 4 of electrophile game equipment 1, respectively, can load the game program of each child electronic game equipment 6 one after another, and can also use it as a bank means which accumulates the content of a game.

[0038] Furthermore, as shown in drawing 8, after this example loads the game a in child electronic game equipment 6 to electrophile game equipment 1, it may change this game a into Game A, and, thereby, becomes possible [changing a configuration and color into a battleship, a destroyer, an aircraft carrier, and the symbol pattern of a shell for UFO of an aggressor game, an aggressor, a beam gun, and the symbol pattern of a missile or changing score computation], for example.

[0039] According to this example, between electrophile game equipment 1 and child electronic game equipment 6 Others [access / loading or], Since it is savable, when the going-out middle class also wants for CRT display 3 of color display and the keyboard 2 of a big operation key to usually perform a game by the big screen, and to enjoy a game That what is necessary is just to carry out a game with handicap type child electronic game equipment 6, when transmitting a game to other electrophile game equipments 1 from electrophile game equipment 1 Can use child electronic game equipment 6 as a game pack, and it is possible to enjoy a game also in a transfer as a game pack moreover. A game can be transmitted to other child electronic game equipments 6 from child electronic game equipment 6 by furthermore saving to electrophile game equipment 1 after loading from child electronic game equipment 6 to other child electronic game equipments 6.

[0040] Drawing 9 shows the 2nd example. In this example, connection equipment 9 is formed in the margin inferior of child electronic game equipment 6, on the other hand, a CRT display is not formed in electrophile game equipment 1, but electrophile game equipment 1 is flat, and one stowage 4 is formed in back one so that ***** opening may be carried out to the upper part. Other component circuits are the same as the 1st example, give the same sign to the same part, and omit the explanation in it.

[0041] Then, operation of the load key of the keyboard 2 of electrophile game equipment 1 loads the game program in the sub memory 13 of child electronic game equipment 6 to the main memory 10 of electrophile game equipment 1 by the same processing as the 1st example by the pattern shown in drawing 3. After loading, if the keyboard 2 of electrophile game equipment 1 is operated and a game is performed, game executive operation is made by main CPU14 of electrophile game equipment 1, as a result, data are transmitted by the pattern shown to the fictive CPU 16 of child electronic game equipment 6 through the connection equipments 5 and 9 at drawing 5, and game advance process is displayed on the liquid crystal display 8 through the driver 17.

[0042] According to this example, looking at the display of the liquid crystal display 8 of child electronic game equipment 6, a game can be enjoyed by the big key of electrophile game equipment 1, and even if operability is good and there is no CRT display, it can be managed.

[0043] in this case, the above-mentioned loading is not performed like the 1st example, but it processes by main CPU14 of electrophile game equipment 1 carrying out reading appearance of the game program in the sub memory 13 of child electronic game equipment 6 directly, and data are transmitted to a fictive CPU 16 and you may make it display them as a result

[0044] Drawing 10 - drawing 13 show the 3rd example. In this example, as shown in drawing 10 and drawing 11, a stowage 4 is made it is large and shallow, and receipt is made possible so that the upper surface may expose child electronic game equipment 6 to this stowage 4. The connection equipment 9 of child electronic game equipment 6 serves as a rubber electrode attached in the lower part background of child electronic game equipment 6, and the connection equipment 5 of another side electrophile game equipment 1 serves as an electrode on the substrate exposed on the stowage 4 base. As shown in drawing 11, it projects in a stowage 4 and the engagement heights 18 are formed, and the marginal part of the near side of a stowage 4 is forced on the connection equipment 5 whose connection equipment 9 of a rubber electrode is an electrode on a substrate when the crevice on the upper surface of a soffit of child electronic game equipment 6 is engaged from the inferior surface of tongue of these engagement heights 18. It dissociates with electrophile game equipment 1, and CRT display 3 is connected through the connection code. Other composition and the circuit are the same as the 1st example, give the same sign to the same part, and omit the explanation.

[0045] Then, if the key 7 of child electronic game equipment 6 is operated in order to begin a game, as this key stroke is detected and it is shown in drawing 13 through the control signal line of drawing 2, a fictive CPU 16 will give interrupt signal INT to main CPU14 of electrophile game equipment 1, and will order it interruption processing. Thereby, while main CPU14 gives a fictive CPU 16 a selection signal CE and bus lines a, D, and A are opened, the instruction code transfer signal OP is also given to a fictive CPU 16, the transfer output of the key input instruction which shows that there was a key input by this is carried out through bus lines a, D, and A, and this instruction code is written in main CPU14. If a fictive CPU 16 receives a selection signal CE at this time, a fictive CPU 16 will suspend the output of interrupt signal INT.

[0046] After the writing of a key input instruction finishes, main CPU14 gives a fictive CPU 16 a selection signal CE again, and a fictive CPU 16 gives the keycode by the key 7 above-mentioned operation to main CPU14. Main CPU14 performs processing according to this keycode based on the game program directly read from the sub memory 13, and, as a result, displays data on CRT display 3 through the CRT controller 15. In this way, game advance process is displayed on CRT display 3 by continuing key 7 operation of child electronic game equipment 6. In this case, in main CPU14, the display pattern data with which the liquid crystal display 8 of child electronic game equipment 6 was fixed are changed into the pattern data for CRT display 3 display based on the program beforehand set to main memory 10. However, if the liquid crystal display 8 of child electronic game equipment 6 of this

conversion is the thing of the object for television image display, or a dot display format, there will be no need not much.

[0047] Moreover, main CPU14 is transmitted to a factice CPU 16 about score calculation result data, and, thereby, the factice CPU 16 is displaying the score on a liquid crystal display 8 through a driver 17.

[0048] According to this example, operation of the key 7 of child electronic game equipment 6 can remain as it is, only the display screen can be used as CRT display 3 of the big screen which is powerful legible, and ** can also use electrophile game equipment 1 as a converter for a display between CRT display 3 and child electronic game equipment 6.

[0049] In addition, after main CPU14 loads the game program of the sub memory 13 to main memory 10 rather than carries out direct access of the sub memory 13, you may be made to perform game execution.

[0050] The 14th drawing 15 shows the 4th example. In this example, child electronic game equipment 6 is made into two bodies, a waging-war game is made possible, as shown in drawing 14, a stowage is omitted, and electrophile game equipment 1 and two child electronic game equipments 6 and 6 are connected through the connection code. Other composition and the circuit are the same as the 3rd example, give the same sign to the same part, and omit the explanation.

[0051] Then, if the load key of the keyboard 2 of electrophile game equipment 1 is operated, as the pattern shown in drawing 3 shows to drawing 15 like the case of the 1st and the 2nd example, it will be carried out mouth-DO. In this case, the game a set in child electronic game equipment 6 While applying the shell discharged from its own tank to a partner's tank and competing for a score to **. It is the game that it will be destroyed and added points if a mine is buried it to be ** and a partner's tank contacts, and if this game a is loaded to electrophile game equipment 1, main CPU14 will be changed into the game A which is not performed, and will reset the display about a mine to main memory 10. After loading, if a mine setup is performed by operating the key 7 of the child electronic game equipments 6 and 6 before beginning a game, a factice CPU 16 will detect this key stroke, and will perform keycode writing as shown in drawing 13 like the interruption processing stated in the 3rd example to main CPU14. Main CPU14 performs processing of a mine setup according to this keycode based on the program of Game A, and makes main memory 10 memorize the position data of the mine. In this case, although the position of the mine which he set up is not displayed on the liquid crystal display 8 of a CRT display and a waging-war partner's child electronic game equipment 6, it is displayed on the liquid crystal display 8 of its own child electronic game equipment 6.

[0052] And the keycode by the key stroke to which the key 7 of child electronic game equipment 6 is operated, a game is started, and its own tank is moved, or the key stroke which fires a shell While it is given to main CPU14 and movement / discharge display is made by CRT display 3 through the CRT controller 15 by interruption processing shown in drawing 13 like the case of the above-mentioned mine setup Furthermore, it is transmitted also to a partner's child electronic game equipment 6, and is displayed also on the liquid crystal display 8. If the shell which its own tank discharged hits a partner's tank, that will be judged by main CPU14, and partner tank destructive data and the added score data of self will be given and displayed on CRT display 3 and each child electronic game equipments 6 and 6. Moreover, if its own tank contacts a partner's mine, similarly that will be judged by main CPU14, and their own tank destructive data and the score data of the partner who added will be given and displayed on a CRT display and each child electronic game equipments 6 and 6.

[0053] According to this example, the position of the mine which itself who a waging-war game can be enjoyed [himself] by two or more persons, and he can use [himself } the child electronic game equipments 6 and 6 as a control panel for moving its own tank etc., and does not want to show a partner set up can also be displayed only on its own child electronic game equipment 6, and a more interesting game can be enjoyed.

[0054] In addition, it is also possible to increase the child electronic game equipment 6 to connect further, and to enjoy a mah-jongg game, a cards game, etc. by three or more persons.

[0055] moreover, main CPU14 carries out reading appearance of the program of the game a of each sub memory 13 and 13 directly, and you may make it process it instead of the above-mentioned loading, as

the 2nd example also described

[0056] Furthermore, each is installed in opposite **, using CRT display 3 as two bodies, and you may make it display the position of the mine which he set only to one CRT display 3.

[0057] In addition, in the above-mentioned example, although the display 3 and 8 of each electronic game equipments 1 and 6 was based on CRT or liquid crystal, it may be EL (electroluminescence) discharge tubes etc.

[0058] Moreover, in the above-mentioned example, although each memory 10 and 13 was a RAM simple substance, it may make auxiliary memory, such as a magnetic tape, add, and may enlarge capacity.

[0059] Furthermore, although the key performed drive operation of each electronic game equipments 1 and 6 in the above-mentioned example, a thing, a rotation handle, etc. of the thing of a joystick formula, the thing of a lever formula, or a slide switch formula may be **.

[0060] Furthermore, although electrically carried out through the connection equipments 5 and 9 in performing the above-mentioned save, loading, and access, an acoustic wave, light, etc. may be made to perform data and a program transfer.

[0061] In addition, to one electrophile game equipment 1, CRT display 3 is connected with some child electronic game equipment 6, and it may be made to perform two or more games by the real-time operation.

[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] Parent-and-child electronic game equipment characterized by what is characterized by providing the following. Child electronic game equipment equipped with a display means display the game effective process by the 1st processing means which performs the game program memorized by the aforementioned memory means by the key stroke of the 1st key means operated in order to advance the memory means and game which memorize a game program, and this 1st key means, and this 1st processing means handicap type. Parent [who displays game effective process on the display equipped with the bigger display means than the aforementioned display means of this child electronic game through a connection code] electronic game equipment. ***** and the aforementioned parent electronic game equipment are a connector means by which electrical installation is carried out to the game program memorized by the aforementioned memory means of the aforementioned child electronic game equipment. The 2nd processing means which performs the game program memorized by the aforementioned memory means, and sends out game effective process to the aforementioned display through the aforementioned connection code by operation of the 2nd key means operated in order to advance a game, and this 2nd key means.

[Translation done.]